

In the Claims:

Claims 12, 13, 15, 16 and 18-28 are pending in the application.

Claims 12, 13, 15, 1 and 18-28 stand rejected.

Explanation of Amendments in the Claims:

1.(previously cancelled)

2.(previously cancelled)

3.(previously cancelled)

4.(previously cancelled).

5.(previously cancelled).

6.(previously cancelled).

7.(previously cancelled).

8.(previously cancelled).

9.(previously cancelled).

10.(previously cancelled)

11.(previously cancelled)

12.( currently amended)    A method of detecting moisture in within and on a surface of an absorbent material, the method comprising:

providing a tape formed by a substrate of a dielectric, hydrophobic material, a layer of a mounting adhesive on a bottom surface of the substrate and a first and a second spaced apart elongate parallel conductors mounted on a top surface of the substrate and extending therealong;

attaching the tape by the adhesive on to a surface of the material so as to mount the ~~two~~ first and second conductors on or adjacent the surface of the material;

~~providing a at each of a plurality of longitudinally spaced locations along the adhesively attached tape a respective pair of~~ plurality of pairs of conductive

probes;

locating each pair of conductive probes at a respective location with the locations spaced along the tape;

each pair comprising a first conductive probe associated with the first conductor and a second conductive probe associated with the second conductor;

wherein each probe includes at least one rigid elongate conductive element of a corrosion resistant material;

forcing each probe longitudinally into the material at the respective location so as to penetrate through the surface of the material and to engage into the absorbent material;

as the first conductive ~~each~~ probe of each pair is forced into the absorbent material, causing [a] the first conductive probe ~~of each pair~~ to penetrate the first conductor of the tape such that the first conductive probe is electrically connected to the first conductor by penetrating therethrough;

and as the second conductive probe of each pair is forced into the absorbent material, causing [a] the second conductive probe of each pair to penetrate the second conductor of the tape such that the second conductive probe is electrically connected to the second conductor by penetrating therethrough;

applying a voltage across the first and second ~~two~~ conductors; and

monitoring currents passing between the first and second conductors so as to detect changes in electrical resistance between the first and second conductors caused by moisture on the material and so as to detect changes in electrical resistance between the first and second conductive probes of the plurality of pairs of

conductive probes, caused by moisture content within the absorbent material.

13.( currently amended) A method according to claim 12 wherein the first and second conductors of the tape are covered by a protective layer of non-hygroscopic, water pervious, dielectric material secured to the to the top surface of the substrate and extending over the first and second conductors.

14.(previously cancelled)

15.( currently amended) A method according to claim 12 wherein each of the first and second conductors is a flat metal strip at least 6.5 mm wide.

16.( currently amended) A method according to claim 12 wherein the first and second conductors are spaced apart by a distance of at least 13 mm.

17.(previously cancelled)

18.( previously cancelled)

19.(previously amended) A method according to claim 12 wherein the absorbent material is a moisture permeable element of a building construction.

20.( previously cancelled)

21.(currently amended) A method of detecting moisture within and on a surface of an absorbent material, the method comprising:

providing a tape formed by a substrate of dielectric, hydrophobic material, a layer of a mounting adhesive on a bottom surface of the substrate and a first and a second spaced apart, elongate, parallel conductors mounted on a top surface of the substrate and extending therealong;

attaching the tape by the adhesive on to a surface of the material so as to mount the ~~two~~ first and second conductors on or adjacent the surface of the

material;

~~providing a at each of a plurality of longitudinally spaced locations along the adhesively attached tape a respective pair of plurality of pairs of conductive probes;~~

locating each pair of conductive probes at a respective location with the locations spaced along the tape;

each pair comprising a first conductive probe associated with the first conductor and a second conductive probe associated with the second conductor;

wherein each probe includes at least one rigid elongate conductive element of a corrosion resistant material;

forcing each of the first and second conductive probes ~~probe~~ longitudinally into the material at the respective location so as to penetrate through the surface of the material and to engage into the absorbent material;

the first and second conductive probes of each pair being spaced apart such that current can flow through the material between the first and second conductive probes when moisture is present in the material;

as the first conductive probe of each pair is forced into the absorbent material, causing the first conductive probe to engage the first conductor of the tape such that the first conductive probe is electrically connected to the first conductor;

as the second conductive probe of each pair is forced into the absorbent material, causing the second conductive probe to engage the second conductor of the tape such that the second conductive probe is electrically connected to the second conductor;

applying a voltage across the first and second conductors; and  
 monitoring currents passing between the first and second conductors so as to detect changes in electrical resistance between the first and second conductors caused by moisture in the material and so as to detect changes in electrical resistance between the first and second conductive probes of the plurality of pairs of conductive probes caused by moisture content within the absorbent material.

22.(currently amended) A method according to Claim 21 wherein the first and second conductors of the tape are covered by a protective layer of non-hygroscopic, water pervious, dielectric material secured to the top surface of the substrate and extending over the first and second conductors.

23.(previously amended) A method according to Claim 21 wherein each of the first and second conductors is a flat metal strip at least 6.5 mm wide.

24.(previously amended) A method according to Claim 21 wherein the first and second conductors are spaced apart by a distance of at least 13 mm.

25.(cancelled)

26.(previously amended) A method according to Claim 21 wherein the absorbent material is a moisture permeable element of a building construction.

27.(cancelled)

28.(cancelled)

29.(new) A method of detecting moisture within and on a surface of an absorbent material, the method comprising:

providing a tape formed by a substrate having first and second spaced apart, elongate, parallel conductors mounted on the substrate and extending

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attaching the tape by an adhesive on to a surface of the material so as to mount the first and second conductors on or adjacent the surface of the material;

providing a plurality of pairs of conductive probes;

locating each pair of conductive probes at a respective location with the locations spaced along the tape;

each pair comprising a first conductive probe associated with the first conductor and a second conductive probe associated with the second conductor;

wherein each probe includes at least one rigid elongate conductive element of a corrosion resistant material;

forcing each of the first and second conductive probes longitudinally into the material at the respective location so as to penetrate through the surface of the material and to engage into the absorbent material;

the first and second conductive probes of each pair being spaced apart such that current can flow through the material between the first and second conductive probes when moisture is present in the material;

causing the first conductive probe of each pair to be electrically connected to the first conductor of the tape at the respective location;

causing the second conductive probe of each pair to be electrically connected to the second conductor of the tape at the respective location;

applying a voltage across the first and second conductors; and

monitoring currents passing between the first and second conductors so as to detect changes in electrical resistance between the first and second conductors

caused by moisture in the material and so as to detect changes in electrical resistance between the first and second conductive probes of the plurality of pairs of conductive probes caused by moisture content within the absorbent material.

30.(new) A method according to Claim 29 wherein the first and second conductors of the tape are covered by a protective layer of non-hygroscopic, water pervious, dielectric material secured to the top surface of the substrate and extending over the first and second conductors.

31.(new) A method according to Claim 29 wherein each of the first and second conductors is a flat metal strip at least 6.5 mm wide.

32.(new) A method according to Claim 29 wherein the first and second conductors are spaced apart by a distance of at least 13 mm.

33.(new) A method according to Claim 29 wherein the absorbent material is a moisture permeable element of a building construction.